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(54) Title: USE OF EQUOL FOR TREATING ANDROGEN MEDIATED DISEASES

(57) Abstract: Equol (7-hydroxy-3(4'hydroxyphenyl)-chroman), the major metabolite of the phytoestrogen daidzein, specifically binds and blocks the hormonal action of 5α-dihydrotestosterone (DHT) in vitro and in vivo. Equol can bind circulating free DHT and sequester it from the androgen receptor, thus altering growth and physiological hormone responses that are regulated by androgens. These data suggest a novel model to explain equol's biological properties, The significance of equol's ability to specifically bind and sequester DHT from the androgen receptor have important ramifications in health and disease and may indicate a broad and important usage for equol in the treatment and prevention of androgen-mediated pathologies. Thus, equol can specifically bind DHT and prevent DHT's biological actions in physiological and pathophysiological processes.

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